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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/692,612	10/24/2003	Heon Lee	200209575-1	8817	
22879 7	7590 12/07/2004		EXAMINER		
1120 11 22 2 2 2	ACKARD COMPAN	DANG, PHUC T			
	100, 3404 E. HARMONY JAL PROPERTY ADMII		ART UNIT	PAPER NUMBER	
	NS, CO 80527-2400		2818		

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No. Applicant(s)					
		10/692,612	LEE, HEON				
		Examiner	Art Unit)			
	:_:	PHUC T DANG	2818				
The MAILING DAT Period for Reply	E of this communication ap	pears on the cover sheet with the	e correspondence ad	dress			
THE MAILING DATE OF - Extensions of time may be availa after SIX (6) MONTHS from the relation of the period for reply specified at the period for reply is specified at the period for reply is specified. - Failure to reply within the set or of the period for reply is specified.	THIS COMMUNICATION. The substitution of the provisions of 37 CFR 1. The substitution of this communication. The substitution of the substitutio	LY IS SET TO EXPIRE 1 MONTI 136(a). In no event, however, may a reply be oly within the statutory minimum of thirty (30) of will apply and will expire SIX (6) MONTHS fro e, cause the application to become ABANDOI ng date of this communication, even if timely fi	timely filed lays will be considered timel om the mailing date of this co NED (35 U.S.C. § 133).				
Status							
1)⊠ Responsive to com	nmunication(s) filed on <u>24 (</u>	<u> October 2003</u> .					
2a) This action is FINA	This action is FINAL. 2b)⊠ This action is non-final.						
Since this applicati	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordan	ce with the practice under	Ex parte Quayle, 1935 C.D. 11,	453 O.G. 213.				
Disposition of Claims							
4)⊠ Claim(s) <u>1-18</u> is/ar	e pending in the application	n.					
4a) Of the above cl	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/a	5) Claim(s) is/are allowed.						
,	Claim(s) is/are rejected.						
7) Claim(s) is/a	-						
8)⊠ Claim(s) <u>1-18</u> are s	subject to restriction and/or	election requirement.					
Application Papers							
9)☐ The specification is	objected to by the Examin	er.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
11) I he oath or declara	ation is objected to by the E	examiner. Note the attached Omi	ce Action or form P	10-152.			
Priority under 35 U.S.C. § 1	119						
a) ☐ All b) ☐ Some	* c)☐ None of:	n priority under 35 U.S.C. § 119	(a)-(d) or (f).				
	pies of the priority documer		ation No				
	• •	nts have been received in Applic ority documents have been rece		Stane			
•	rom the International Bure		ived in this reactorial	Clage			
• •		at of the certified copies not recei	ived.				
222 3.1							
Attachment(s)							
1) Notice of References Cited (I		4) Interview Summa					
· == ·	ent Drawing Review (PTO-948) ment(s) (PTO-1449 or PTO/SB/08	Paper No(s)/Mail 5) Notice of Informa 6) Other:	Date al Patent Application (PT	O-152)			

Application/Control Number: 10/692,612

Art Unit: 2818

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Group I, Claims 1-12, drawn to a method of making a magnetic tunnel junction device, classified in class 438, subclass 257.
- II. Group II, Claims 22-24, drawn to a magnetic tunnel junction device, classified in class 257, subclass 422.

The inventions are distinct, each from the other because of the following reasons:

- 1. Inventions I and II are related as method of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case unpatentability of the Group II invention would not necessarily imply unpatentability of the Group I invention, since the device of Group II invention could be made by a product different from those of the Group I invention. For example, rather than using an patterning step as required by the Group I invention, the magnetic tunnel junction stack layer could be formed by an etching step. However, the issues of method and product claims are divergent. Furthermore, there may be some overlap in the searches of the two groups, but there is no reason to believe that the searches would be identical. Therefore, based on the additional work involved in searching and examination of the two inventions together, restriction of distinct inventions is clearly proper.
- 2. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined eventhough the requirement be traverse (37 CFR 1.143).
- 3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).
- 4. Any inquiry concerning this communication or earlier communication from the examiner should be direct to Phuc T. Dang whose telephone number (571) 272-1776. The examiner can normally be reached on Monday through Friday from 8:00am to 5:00pm.

P P Langy hu

Phuc T. Dang

Primary Examiner

Art Unit 2818

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